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IS 12809 (1989): Non-woven sew-in interlinings [TXD 33: Industrial Fabrics]



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“Knowledge is such a treasure which cannot be stolen”

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Indian Standard
**NONWOVEN SEW-IN INTERLININGS —
SPECIFICATION**

भारतीय मानक
बिना बुने ग्रन्थरुनी अस्तर — विशिष्ट

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Price Group 2

FOREWORD

This Indian Standard was adopted by the Bureau of Indian Standards on 15 November 1989, after the draft finalized by the Industrial/Engineering Fabrics Sectional Committee had been approved by the Textile Division Council.

Nonwoven interlinings are finding extensive use in the manufacture of garments. These interlinings are used in foreparts, chest reinforcements, collars and stays of jackets, coats, overcoats and raincoats.

In use of fusible interlinings, it should be ensured that delamination (the phenomenon of splitting into two or more distinct layers capable of retaining a two dimensional structure by themselves) does not occur, as it leads to poor abrasion and washing resistance. In such cases the wearing of interlinings is faster in comparison to basic fabric leading to a shorter life of the garments.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test, shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding off numerical values (*revised*)'. The number of significant places retained the rounded off value should be the same as that of the specified value in this standard.

Indian Standard

NONWOVEN SEW-IN INTERLININGS — SPECIFICATION

1 SCOPE

1.1 This standard specifies the requirements of nine varieties (based on mass) of nonwoven sew-in interlinings for use in garments.

2 REFERENCES

2.1 The Indian Standards listed in Annex A are necessary adjuncts to this standard.

3 MANUFACTURE

3.1 The nonwoven sew-in interlinings shall be manufactured from viscose rayon staple fibres by chemical bonding. The fibres for the web formation shall be either parallel laid or random laid as agreed between the buyer and the seller.

4 REQUIREMENTS

4.1 The nonwoven sew-in interlinings shall conform to the requirements of mass, bursting strength, crease recovery angle and dimensional change as given in 4.2 and Table 1.

4.1.1 The coefficient of variation on mass shall not exceed 5 percent.

4.1.2 The bursting strength and crease recovery angle shall be assessed before and after three dry-cleaning cycles according to the procedure for drycleaning given in IS 4802 : 1988.

4.2 Dimensions

The length and width of interlinings in the roll shall be as agreed between the buyer and the seller.

4.2.1 The length shall not be less than the agreed or declared/or marked length. However, a tolerance of ± 1.25 percent shall be permitted on the width.

4.2.2 The dimensions shall be determined by the method given in IS 1954 : 1969.

5 MARKING

5.1 Each roll of interlinings shall be marked with the following information:

- Variety No.,
- Indication of the source of manufacture,
- Length and width of the roll,
- Month and year of manufacture, and
- Any other information required by the law in force.

5.1.1 The interlining may also be marked with Standard Mark.

6 PACKING

6.1 The interlinings shall be packed in continuous lengths of 100 metres or more as agreed in roll form only, free from wrinkles, on cardboard cores covered with polyethylene film. The rolls shall be wrapped with polyethylene film. A suitable number of such rolls shall be covered in kraft paper and hessian [Type II of IS 2818 (Part 2) : 1971]. The stitching shall be carried out all around taking care that the contents are not pierced.

Table 1 Requirements of Nonwoven Sew-in Interlinings
(Clause 4.1)

Variety No.	Mass (see NOTE)	Bursting Strength, <i>Min</i>		Crease Recovery Angle, <i>Min</i>		Dimensional Change, Percent, <i>Max</i> After Three Cycles of Washing
		Before	After Three Cycles of Dry-cleaning	Before	After Three Cycles of Drycleaning	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
	g/m ²	kPa*	kPa*	Degree	Degree	Percent
1	20	80	72	220	190	2
2	30	100	90	230	200	2
3	40	120	108	240	210	2
4	50	140	126	250	220	2
5	60	160	144	260	230	2
6	75	180	162	270	240	2
7	100	205	185	280	250	2
8	125	240	215	290	260	2
9	150	275	245	300	270	2
Tolerance	± 10 percent	—	—	—	—	—
Method of Test	B-2	IS 1966 : 1975		IS 4681 : 1981		IS 1299 : 1984

*1 kPa = 1 k N/m²

7 SAMPLING AND CRITERIA FOR CONFORMITY

7.1 Lot

In a consignment, all the rolls of interlinings of the same variety shall be grouped together to constitute a lot. Each lot shall be separately sampled for the purpose of ascertaining the conformity of the requirements of the specification.

7.2 Sampling

From each lot, sample rolls shall be selected at random as per Table 2. For random selection, procedures as prescribed in IS 4905 : 1968 may be followed.

Table 2 Sampling
(Clause 7.2)

Lot Size (No. of Rolls) (1)	Sample Size (No. of Rolls) (2)
Up to 25	2
26 to 50	3
51 to 100	4
101 and above	5

7.2.1 The rolls selected as per col 2 of Table 2 shall be tested for mass and Bursting strength. For other characteristics, one test shall be conducted and for this purpose, the rolls already sampled as per Table 2, may be used.

7.3 Criteria for Conformity

The lot shall be considered as conforming to this standard if all the test results satisfy the requirements of 4.2.1 and Table 1.

ANNEX A

(Clause 2.1)

LIST OF REFERRED INDIAN STANDARDS

IS No.	Title	IS No.	Title
IS 1299 : 1984	Method for determination of dimensional change on washing of fabrics woven from rayon and synthetic fibres (<i>second revision</i>)	IS 4681 : 1981	Method for determination of recovery from creasing of textile fabrics by measuring the angle of recovery (<i>first revision</i>)
IS 1954 : 1969	Methods for determination of length and width of fabrics (<i>first revision</i>)	IS 4802 : 1988	Method for determination of colour fastness of textile materials to dry-cleaning (<i>first revision</i>)
IS 1966 : 1975	Methods for determination of bursting strength and bursting distension of fabrics—Diaphragm method (<i>first revision</i>)	IS 4905 : 1968	Methods for random sampling
IS 2818 (Part 2) : 1971	Indian hessian: Part 2 305 and 229 g/m ² at 16 percent contract regain	IS 6359 : 1971	Method for conditioning of textile

ANNEX B

(Table 1)

METHODS OF TEST

B-1 ATMOSPHERIC CONDITIONS FOR CONDITIONING AND TESTING

B-1.1 The test shall be carried out in the standard atmosphere at $27 \pm 2^\circ\text{C}$ temperature and 65 ± 2 percent relative humidity (see IS 6359 : 1971).

B-1.2 Prior to test, the specimens shall be conditioned to moisture equilibrium from the dry side in the standard atmosphere. When the specimens have been left in such an atmosphere for 24 hours in such a way as to expose as far as possible all portions to the atmosphere. They shall be deemed to have reached moisture equilibrium.

B-2 MASS

B-2.1 Principle

The area and mass of a test piece is measured and the mass per unit area in grams per square metre is calculated from these measurements.

B-2.2 Apparatus

B-2.2.1 A die which cuts a test piece of area 50 000 mm²

or

A square template having dimensions of 250 × 250 mm or 200 × 200 mm and a sharp razor blade

or

A steel rule, accurately graduated in mm.

B-2.2.2 A weighing balance capable of weighing to an accuracy of 0.1 percent of the pre-determined mass.

B-2.3 Preparation of Test Pieces

B-2.3.1 From each specimen, cut atleast five test pieces, using either the die or the template and a sharp razor blade. If there is insufficient material to cut test pieces of the specified size, cut the largest square possible and measure its area using the steel rule.

B-2.4 Procedure

B-2.4.1 Determine the area of each test piece accurately in mm².

B-2.4.2 Determine the mass of each test piece to an accuracy of 0.1 percent of its mass.

B-2.5 Calculations

B-2.5.1 Calculate the mass (g/m²) from the area and mass of each piece separately.

B-2.5.2 Calculate the mean value of mass as well as the coefficient of variation, percent.

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